

FORM PTO-1390 (Modified) U.S. PATENT AND TRADEMARK OFFICE; U.S. DEPARTMENT OF COMMERCE  
(REV. 7-2005)

**TRANSMITTAL LETTER TO THE UNITED STATES  
DESIGNATED/ELECTED OFFICE (DO/EO/US)  
CONCERNING A SUBMISSION UNDER 35 U.S.C. 371**

ATTORNEY'S DOCKET NUMBER

873.0139.U1(US)

U.S. APPLICATION NO. (If known, see 37 CFR 1.5)

10/567,629

INTERNATIONAL APPLICATION NO.

PCT/US04/25397

INTERNATIONAL FILING DATE

8/6/2004

PRIORITY DATE CLAIMED

8/7/2003

## TITLE OF INVENTION

Method And Apparatus for Discrete Power Synthesis of Multicarrier Signals With Constant Envelope Power Amplifiers

## APPLICANT(S) FOR DO/EO/US

Venkatesh Vadde, Kiran Kuchi

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

1. ☐ This is a **FIRST** submission of items concerning a submission under 35 U.S.C. 371.
2. ☒ This is a **SECOND** or **SUBSEQUENT** submission of items concerning a submission under 35 U.S.C. 371.
3. ☐ This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (24) indicated below.
4. ☐ The US has been elected (Article 31).
5. ☐ A copy of the International Application as filed (35 U.S.C. 371 (c)(2))
  - a. ☐ is attached hereto (required only if not communicated by the International Bureau).
  - b. ☐ has been communicated by the International Bureau.
  - c. ☐ is not required, as the application was filed in the United States Receiving Office (RO/US).
6. ☐ An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)).
  - a. ☐ is attached hereto.
  - b. ☐ has been previously submitted under 35 U.S.C. 154(d)(4).
7. ☐ Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371 (c)(3))
  - a. ☐ are attached hereto (required only if not communicated by the International Bureau).
  - b. ☐ have been communicated by the International Bureau.
  - c. ☐ have not been made; however, the time limit for making such amendments has NOT expired.
  - d. ☐ have not been made and will not be made.
8. ☐ An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).
9. ☒ An oath or declaration of the inventor(s) (35 U.S.C. 371 (c)(4)).
10. ☐ An English language translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371 (c)(5)).
11. ☐ A copy of the International Preliminary Examination Report (PCT/IPEA/409).
12. ☐ A copy of the International Search Report (PCT/ISA/210).

## Items 13 to 23 below concern document(s) or information included:

13. ☐ An Information Disclosure Statement under 37 CFR 1.97 and 1.98.
14. ☐ An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.
15. ☐ A **FIRST** preliminary amendment.
16. ☐ A **SECOND** or **SUBSEQUENT** preliminary amendment.
17. ☐ A substitute specification.
18. ☐ A power of attorney and/or change of address letter.
19. ☐ A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821 - 1.825.
20. ☐ A second copy of the published International Application under 35 U.S.C. 154(d)(4).
21. ☐ A second copy of the English language translation of the International Application under 35 U.S.C. 154(d)(4).
22. ☐ Express Mail Label No.

U.S. APPLICATION NO (if known, see 37 CFR 1.5) <b>10/567,629</b>	INTERNATIONAL APPLICATION NO. <b>PCT/US04/25397</b>	ATTORNEY'S DOCKET NUMBER <b>873.0139.U1(US)</b>
23. Other items or information:		
The following fees have been submitted:		<b>CALCULATIONS      PTO USE</b>
24. <input type="checkbox"/> Basic national fee . . . . . \$300		\$      \$0.00
25. <input type="checkbox"/> Examination fee (37 CFR 1.492(c)) If the written opinion prepared by ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4). . . \$0 All other situations. . . . . \$200		\$      \$0.00
26. <input type="checkbox"/> Search fee (37 CFR 1.492(b)) If the written opinion of the ISA/US or the International preliminary examination report by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4). . . \$0 Search fee (37 CFR 1.445(a)(2)) has been paid on the international application to the as an International Searching Authority. . . . . \$100 International Search Report prepared by an ISA other than the US and provided to the previously communicated to the US by the IB. . . . . \$400 All other situations. . . . . \$500		\$      \$0.00
<b>TOTAL OF 24, 25 and 26 =</b>		\$      \$0.00
<input type="checkbox"/> Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing in compliance with 37 CFR 1.821(c) or (e) or computer program listing in an electronic medium) (37 CFR 1.492(j)). The fee is \$250 for each additional 50 sheets of paper or fraction thereof.		
Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof (round up to a whole)
- 100 =	0 /50 =	0
		x \$250.00
Surcharge of \$130.00 for furnishing any of the search fee, examination fee, or the oath or declaration after the date of commencement of the national stage (37 CFR 1.492(h)).		\$      \$130.00
CLAIMS	NUMBER FILED	NUMBER EXTRA
Total claims	- 20 =	0
Independent claims	- 3 =	0
MULTIPLE DEPENDENT CLAIMS (if applicable) <input type="checkbox"/> + \$360.00		\$      \$0.00
<b>TOTAL OF ABOVE CALCULATIONS =</b>		\$      \$130.00
<input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. Fees above are reduced by 1/2.		\$      \$0.00
<b>SUBTOTAL =</b>		\$      \$130.00
Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(i)).		\$      \$0.00
<b>TOTAL NATIONAL FEE =</b>		\$      \$130.00
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40 per property +		\$      \$0.00
<b>TOTAL FEES ENCLOSED =</b>		\$      \$130.00
01/10/2007 LANDGRA 00000043 10567629 01 FC:1617 130.00 OP		Amount to be \$
		Amount to be \$

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

- a. ☒ A check in the amount of \$ \$130.00 to cover the above fees is enclosed.
- b. ☐ Please charge my Deposit Account No. \_\_\_\_\_ in the amount of \$ \_\_\_\_\_ to cover the above fees.  
A duplicate copy of this sheet is enclosed.
- c. ☒ The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 50-1924. A duplicate copy of this sheet is enclosed.
- d. ☐ Fees are to be charged to a credit card. **WARNING:** Information on this form may become public. **Credit card information should not be included on this form.** Provide credit card information and authorization on PTO-2038.

**NOTE:** Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the International Application to pending status.

SEND ALL CORRESPONDENCE TO:

Harrington & Smith, PC  
4 Research Drive  
Shelton, CT 06484-6212  
Customer No. 29683

  
SIGNATURE

Gerald J. Stanton

NAME

46,008

REGISTRATION NUMBER

January 3, 2007

DATE



## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

U.S. APPLICATION NUMBER NO.	FIRST NAMED APPLICANT	ATTY. DOCKET NO.				
10/567,629	Venkatesh Vadde	873.0139.U1(US)				
29683 HARRINGTON & SMITH, LLP 4 RESEARCH DRIVE SHELTON, CT 06484-6212		INTERNATIONAL APPLICATION NO. PCT/US04/25397				
US ACTION DUE DATE <u>11/15/07</u> PAPER DATED <u>11/15/06</u> OA _____ FINAL _____ (MSG PT) _____ DWG _____ APPEAL _____ ISSUE FEE _____ OTHER <u>5/15/07</u>		<table border="1"> <tr> <td>I.A. FILING DATE</td> <td>PRIORITY DATE</td> </tr> <tr> <td>08/06/2004</td> <td>08/07/2003</td> </tr> </table>	I.A. FILING DATE	PRIORITY DATE	08/06/2004	08/07/2003
I.A. FILING DATE	PRIORITY DATE					
08/06/2004	08/07/2003					
		CONFIRMATION NO. 1308 371 FORMALITIES LETTER  *OC000000021231869*				

Date Mailed: 11/15/2006

### NOTIFICATION OF MISSING REQUIREMENTS UNDER 35 U.S.C. 371 IN THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US)

The following items have been submitted by the applicant or the IB to the United States Patent and Trademark Office as a Designated / Elected Office (37 CFR 1.495).

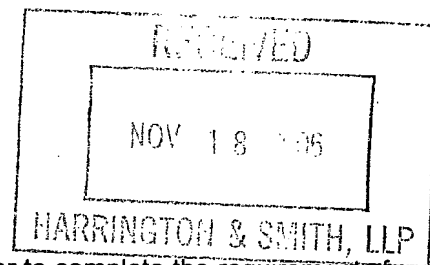
- Copy of the International Application filed on 02/07/2006
- Copy of the International Search Report filed on 02/07/2006
- Copy of IPE Report filed on 02/07/2006
- Preliminary Amendments filed on 02/07/2006
- Information Disclosure Statements filed on 02/07/2006
- U.S. Basic National Fees filed on 02/07/2006
- Priority Documents filed on 02/07/2006
- Specification filed on 02/07/2006
- Claims filed on 02/07/2006
- Abstracts filed on 02/07/2006
- Drawings filed on 02/07/2006

The applicant needs to satisfy supplemental fees problems indicated below.

The following items **MUST** be furnished within the period set forth below in order to complete the requirements for acceptance under 35 U.S.C. 371:

- Oath or declaration of the inventors, in compliance with 37 CFR 1.497(a) and (b), identifying the application by the International application number and international filing date.
- To avoid abandonment, a surcharge (for late submission of filing fee, search fee, examination fee or oath or declaration) as set forth in 37 CFR 1.492(h) of \$130 for a non-small entity, must be submitted with the missing items identified in this letter.

SUMMARY OF FEES DUE:



Total additional fees required for this application is **\$130** for a Large Entity:

- **\$130** Surcharge.

**ALL OF THE ITEMS SET FORTH ABOVE MUST BE SUBMITTED WITHIN TWO (2) MONTHS FROM THE DATE OF THIS NOTICE OR BY 32 MONTHS FROM THE PRIORITY DATE FOR THE APPLICATION, WHICHEVER IS LATER. FAILURE TO PROPERLY RESPOND WILL RESULT IN ABANDONMENT.**

The time period set above may be extended by filing a petition and fee for extension of time under the provisions of 37 CFR 1.136(a).

Applicant is reminded that any communications to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above (37 CFR 1.5)

Registered users of EFS-Web may alternatively submit their reply to this notice via EFS-Web.  
<https://sportal.uspto.gov/authenticate/AuthenticateUserLocalEPF.html>

For more information about EFS-Web please call the USPTO Electronic Business Center at **1-866-217-9197** or visit our website at <http://www.uspto.gov/ebc>.

**If you are not using EFS-Web to submit your reply, you must include a copy of this notice.**

DEBORAH D WILLIAMS

Telephone: (703) 308-9140 EXT 205

**PART 1 - ATTORNEY/APPLICANT COPY**

U.S. APPLICATION NUMBER NO.	INTERNATIONAL APPLICATION NO.	ATTY. DOCKET NO.
10/567,629	PCT/US04/25397	873.0139.U1(US)

IN THE U.S. PATENT AND TRADEMARK OFFICE

In re U.S. Patent Application of:

Applicant: Vadde et al.

Serial No.: 10/567,629

Filed: 8/6/2004

Title: Method And Apparatus for Discrete Power Synthesis of Multicarrier  
Signals with Constant Envelope Power Amplifiers

Attorney Docket No.: 873.0139.U1(US)

Certificate of Mailing

I hereby certify that the following correspondence:

Transmittal Letter to U.S. Designated/Elected Office

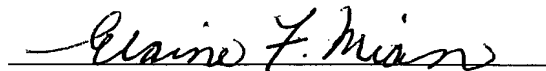
Declaration and Power of Attorney

Check for \$130.00

is being deposited with the United States Postal Service, on the date shown below, first class  
mail, in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria,  
VA 22313-1450, Mail Stop PCT

January 3, 2007

Date

A handwritten signature in cursive script, reading "Elaine F. Mian", is written over a horizontal line.

Elaine F. Mian